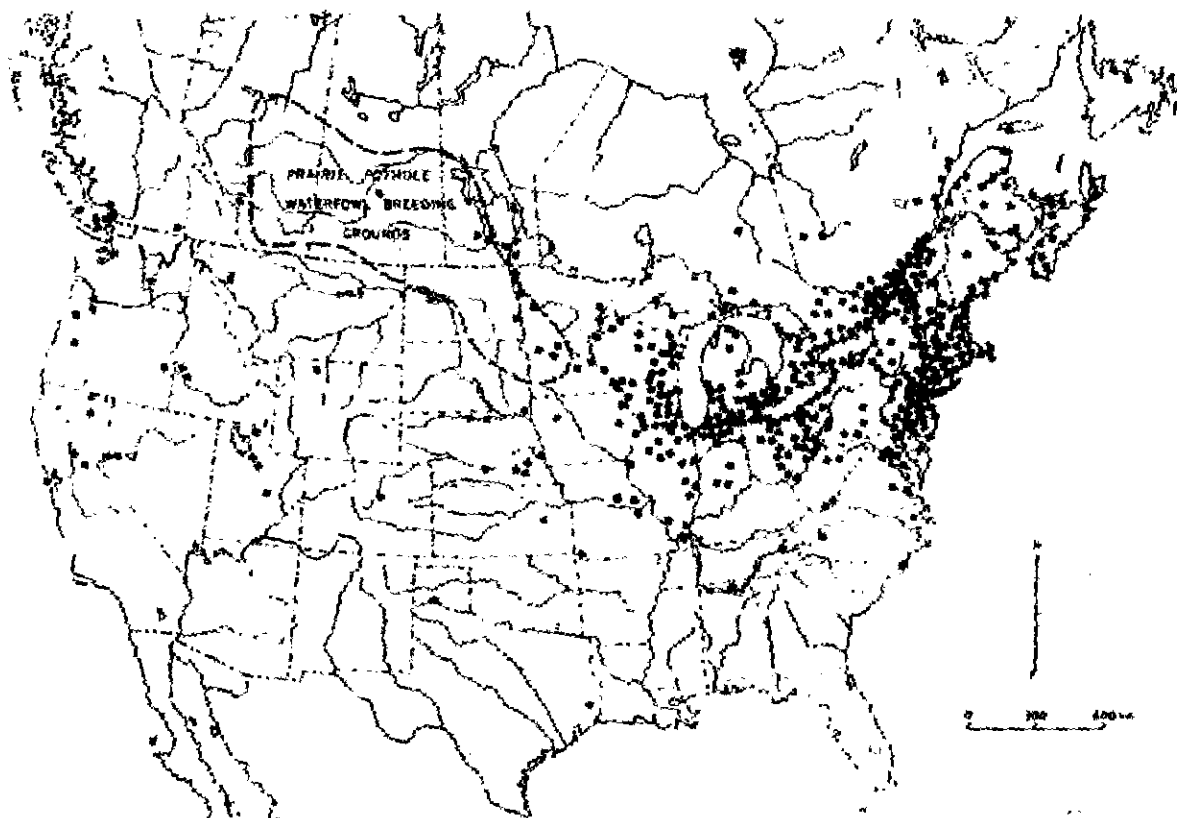


**Figure 2- Distribution of purple loosestrife, *Lythrum salicaria*, in Minnesota by township section, Skinner et al. 1989.**



**Figure 3- Distribution of purple loosestrife, *Lythrum salicaria*, in North America as of 1985 (Thopson et al. 1987).**

## **Technical Feasibility and Timing**

The alternative to the current plan is to not take action. Inaction would inevitably result in the continuation of the invasion process, only postponing prevention, detection, and treatment. This alternative is unacceptable due to grave threats to the Bay-Delta wildlands, riparian systems, and endangered species posed by large populations of this explosive weed (see Ecological and Biological Benefits/Harm Prevented Section). Purple loosestrife can spread quickly and with increases in population size there is a greater reliance on herbicide treatments for eradication and the probability of eradication decreases. Alternative control methods for each loosestrife population, addressed in the adaptive management plan, will enable the implementation of best Integrated Weed Management practices/tools, appropriate to each situation.

All currently proposed methods of purple loosestrife management are either inherently benign or have passed through CEQA equivalent environmental reviews (refer to Project Description, Section 4, a summary of the proposed control options). The herbicide Rodeo has been registered in California for over a decade and has passed review by both the US EPA and the California EPA for label compliant usage on aquatic vegetation. CDFA will follow all use restriction requirements recommended by CalEPA in their approval of the material use. The CDFA will consult with the California Department of Fish and Game and the United States Fish and Wildlife Service to determine if additional measures are needed for site specific actions in sensitive habitats (e.g., habitats of threatened and endangered species identified in the Natural Diversity Database). When used in sensitive habitats, water sampling will be conducted by the Pesticide Investigation Unit of the California Department of Fish and Game. Recent water sampling after the use of Rodeo for Giant Cane removal showed concentrations in nearby water far lower than known toxicity to fish and amphibians.

The use of biological control agents for purple loosestrife (*Galerucella californiensis*, *G. pusilla*, *Hylobius transversovittatus*, and *Nanophyes marmoratus*) have been approved nationally for release by the Technical Advisory Group (TAG) of US Department of Agriculture based on host specificity, after extensive feeding trials on appropriate native and horticultural plants. They have been approved for release in California after testing and review by California Department of Food and Agriculture scientists and regulators.

Project leaders do not foresee any implementation issues/constraints. Such issues are not expected because the proposed purple loosestrife project has been modeled closely after the very successful Hydrilla Eradication Program. Furthermore, Hydrilla was initially more widespread and, due to its submersed state, is more difficult to eradicate. Additionally, the Integrated Pest Control Branch has had success in totally eradicating 13 weeds from California and over hundreds of weed population from local areas. ONLY if massive, previously unknown populations were discovered, would the project shift from an eradication effort to containment and biological control campaign.

## **Project Monitoring**

Consistent with the adaptive management approach, the CDFA and cooperators will be continuously monitoring three different aspects of the project. Evaluation of the overall treatment and detection hypotheses and the yearly tactical integrated control plan will be ongoing throughout the duration of the project. Specifically we will be addressing:

**Treatment efficacy** - Depending on which management tools are employed, follow-up will ensure that treatment results in purple loosestrife mortality and/or non-reproduction within the same season as treatment. After a foliar application, herbicides often take one or two months to be translocated to the roots and stems. Due to this delay in activity, there is a lag time in determining treatment efficacy. Follow-up will involve a visual assessment after sufficient time has passed for treatment effects to be adequately measured. Follow-up in terms of biological control, is necessary in both the same season, as well as subsequent seasons, to determine if agents were successfully established. The CDFA has vast expertise in treatment follow-up, inherently a straight forward activity. Determining the long term impacts of bio-control agents on populations numbers is a much more complicated activity which would extend beyond the time-line of this project.

**Eradication efficacy** - Follow-up in subsequent years, at all treatment sites, will determine population status-i.e. if populations are approaching eradication, containment, or control. A visual sampling for both flowering and vegetative plant material will be carried out by trained personnel in a thorough and systematic manner-even if total kill of existing plants is achieved in a given year. Follow-up must be done for at a minimum of five years to ensure that seeds in the soil do not germinate and re-infest the area. The CDFA and cooperators will carry-out follow-up monitoring for the duration of seed viability.

**Water sampling** - In sensitive habitats, herbicide applications will be accompanied by both before and after testing for herbicide residues in adjacent non-flowing water sources. Such precautionary testing will serve as an overall programmatic check. The California Department of Fish and Game's Pesticide Investigations Unit will be contracted for water sampling analysis. The CDFA will sample water in non-flowing situations immediately before and after herbicide treatments and one week later. The project budgeted accounts for a total of 81 individual samples (\$148/sample). With three replicates and three sampling dates this allows for investigated residues from nine treatments. Because there will probably be over a hundred treatments, the sampling will be used as a programmatic check and for high sensitivity situations, rather than providing a direct check for every treatment. It should be re-emphasized that all treatments are consistent with state and federal EPA requirements and have been extensively tested for toxicity to fish and amphibians. Furthermore, the California Department of Fish and Game's Pesticide Investigations Unit has been testing Rodeo used for Arundo application in semi-aquatic habitats and detailed toxicity tests on larval amphibians and has found a lack of detectable residues post treatment in the water.

All monitoring will be carried out in accordance with the scientific literature and following the guidelines and conceptual models of the Comprehensive Monitoring, Assessment and Research Program (CMARP). Specifically, issues from the CMARP document chapter on Monitoring for Non-indigenous Organisms will be addressed.

**Table 4 Biological/Ecological Objectives**

<b>Hypothesis to be Evaluated</b>	<b>Monitoring Parameters and Data Collection Approach</b>	<b>Data Evaluation Approach</b>	<b>Comments/ Data priority</b>
<b>Treatment efficacy</b> - Depending on which management tools are employed, follow-up will ensure that treatment results in purple loosestrife mortality and/or non-reproduction within the same season as treatment. After a foliar application, herbicides often take one or two months to be translocated to the roots and stems. Due to this delay in activity, there is a lag time in determining treatment efficacy.	Follow-up will involve a visual assessment after sufficient time has passed for treatment effects to be adequately measured. Follow-up in terms of biological control, is necessary in both the same season, as well as subsequent seasons, to determine if agents were successfully established. The CDFA has vast expertise in treatment follow-up, inherently a straight forward activity. Determining the long term impacts of bio-control agents on populations numbers is a much more complicated activity which would extend beyond the time-line of this project.	Follow-up will involve a visual assessment after sufficient time has passed for treatment effects to be adequately measured. Follow-up in terms of biological control, is necessary in both the same season, as well as subsequent seasons, to determine if agents were successfully established. The CDFA has vast expertise in treatment follow-up, inherently a straight forward activity. Determining the long term impacts of bio-control agents on populations numbers is a much more complicated activity which would extend beyond the time-line of this project.	High
<b>Eradication efficacy</b> - Follow-up in subsequent years, at all treatment sites, will determine population status- i.e. if populations are approaching eradication, containment, or control.	A visual sampling for both flowering and vegetative plant material will be carried out by trained personnel in a thorough and systematic manner-even if total kill of existing plants is achieved in a given year. Follow-up must be done for at a minimum of five years to ensure that seeds in the soil do not germinate and re-infest the area. The CDFA and cooperators will carry-out follow-up monitoring for the duration of seed viability.	A visual sampling for both flowering and vegetative plant material will be carried out by trained personnel in a thorough and systematic manner-even if total kill of existing plants is achieved in a given year. Follow-up must be done for at a minimum of five years to ensure that seeds in the soil do not germinate and re-infest the area. The CDFA and cooperators will carry-out follow-up monitoring for the duration of seed viability.	High

**Table 4 (Continued) Biological/Ecological Objectives**

Hypothesis to be Evaluated	Monitoring Parameters and Data Collection Approach	Data Evaluation Approach	Comments/Data Priority
<b>Water sampling</b> - In sensitive habitats, herbicide applications will be accompanied by both before and after testing for herbicide residues in adjacent non-flowing water sources. Such precautionary testing will serve as an overall programmatic check.	The California Department of Fish and Game's Pesticide Investigations Unit will be contracted for water sampling analysis. The CDFA will sample water in non-flowing situations immediately before and after herbicide treatments and one week later. The project budgeted accounts for a total of 81 individual samples (\$148/sample). With three replicates and three sampling dates this allows for investigated residues from nine treatments. Because there will probably be over a hundred treatments, the sampling will be used as a programmatic check and for high sensitivity situations, rather than providing a direct check for every treatment. It should be re-emphasized that all treatments are consistent with state and federal EPA requirements and have been extensively tested for toxicity to fish and amphibians. Furthermore, the California Department of Fish and Game's Pesticide Investigations Unit has been testing Rodeo used for Arundo application in semi-aquatic habitats and detailed toxicity tests on larval amphibians and has found a lack of detectable residues post treatment in the water.	The California Department of Fish and Game's Pesticide Investigations Unit will be contracted for water sampling analysis. The CDFA will sample water in non-flowing situations immediately before and after herbicide treatments and one week later. The project budgeted accounts for a total of 81 individual samples (\$148/sample). With three replicates and three sampling dates this allows for investigated residues from nine treatments. Because there will probably be over a hundred treatments, the sampling will be used as a programmatic check and for high sensitivity situations, rather than providing a direct check for every treatment. It should be re-emphasized that all treatments are consistent with state and federal EPA requirements and have been extensively tested for toxicity to fish and amphibians. Furthermore, the California Department of Fish and Game's Pesticide Investigations Unit has been testing Rodeo used for Arundo application in semi-aquatic habitats and detailed toxicity tests on larval amphibians and has found a lack of detectable residues post treatment in the water.	High

## **Local Involvement**

County Agricultural Commissioners often share or take the lead role with the CDFA on all County weed projects. In line with this historic partnership, the CDFA has already contacted the Ag Commissioner in each county where intensive survey or eradication treatments are planned. The Counties fully support the proposed project, both Phases I and II. Furthermore, we have sent out a letter notifying each County Board of Supervisors, Planning Department, and Agricultural Commissioner's office in compliance with the instructions in the Proposal Solicitation Package. The Counties which have been contacted include: Butte, Contra Costa, Fresno, Nevada, Placer, San Joaquin, Sacramento, Stanislaus, Shasta, Solano, Sonoma, Sutter, Tehama, Yolo, and Yuba. A copy of the letter is attached along with the mailing list.

We will also be working closely with our own local CDFA Integrated Pest Control Branch District Weed Eradication Biologists. They will be assisting with the detection and eradication work in-kind as well as providing usage of boats and trucks off budget.

## **Further Anticipated Local Collaborators and Partners**

### **Local Weed Management Areas**

The Integrated Pest Management Branch has been taking a lead role in the promotion and coordination of county-wide Weed Management Areas (WMA's). They are local weed management groups made-up of concerned citizens, members from private groups and State, Federal, County Agencies. Groups sign memoranda of understanding, hold regular meetings, formulate weed management plans, and conduct a wide range of weed prevention, education, detection, and control projects. We will give presentations on purple loosestrife at their meetings and enlist their support and in-kind work contributions.

### **State and Federal Agencies**

Collaboration will include, but not be limited to locally employees of the following agencies: California Department of Fish and Game, California Department of Boating and Waterways, US Bureau of Reclamation, US Fish and Wildlife Service, US Department of Agriculture - Aquatic Plant Lab. We will be giving focused training in purple loosestrife identification and soliciting participation from local agency personnel in detection and monitoring work. We will be seeking in-kind contributions of boat time whenever possible.

### **Resource Conservation Districts, Local Watershed Groups, California Native Plant Society**

When possible education and detection activities will be coordinated with other existing local groups. Each California Native Plant Society (CNPS) has an exotic plant chairperson. They will all be contacted and incorporated into the education and detection work if willing. Jake Sigg, the CNPS president is a leader in the invasive plant field has committed to stepping up their involvement in this area. The Resource Conservation Districts will be included into the project when appropriate.

Property access will be facilitated through the County Agricultural Commissioners office if on private land. The MOU signed by the members of the California Interagency Noxious Weed Coordinating Committee ensures cooperation in attaining access to public lands.

## DEPARTMENT OF FOOD AND AGRICULTURE



1220 N Street, Room A-357  
Sacramento, CA 95814  
(916) 654-0768

April 14, 1999

TO: COUNTY AGRICULTURAL COMMISSIONER  
COUNTY BOARD OF SUPERVISORS  
COUNTY PLANNING DEPARTMENT

SUBJECT: Notification of grant proposal submitted to the CALFED Program.  
Proposal Title: Purple Loosestrife Prevention, Detection, and Control Actions for the Sacramento-San Joaquin River Delta System and Associated Hydrological Units.

The Integrated Pest Control Branch of the California Department of Food and Agriculture has submitted a grant proposal to the CALFED Ecosystem Restoration Projects and Programs' "Solicitation for Proposals". As part of the application process we are required to notify the Board of Supervisors and the Planning Departments in each County where work is proposed. The proposal is titled: Purple Loosestrife Prevention, Detection, and Control Actions for the Sacramento-San Joaquin River Delta System and Associated Hydrological Units. Purple loosestrife is a Noxious aquatic weed that poses a great threat to the wetlands and waterways of the State. We are notifying the County Agricultural Commissioner as well, since they are considered to be collaborators on the project. An executive summary of the project is enclosed and a project map showing where purple loosestrife is located and where control and detection will be done.

If you would like a full copy of the proposal or have any question contact myself or Steve Schoenig at (916)-654-0768.

Sincerely,

A handwritten signature in cursive script that reads "Steve Schoenig".

*for* Nathan Dechoretz, Program Supervisor  
Integrated Pest Control Branch  
Plant Health and Pest Prevention Services

Enclosures



Butte County Board of Supervisors  
County Drive  
Oroville, CA 95965

Butte County Planning Commission  
#7 County Center Drive  
Oroville, CA 95965

Contra Costa County Board of Supervisors  
Pine Street  
Martinez, CA 94553

Contra Costa County Planning Commission  
651 Pine Street  
4<sup>th</sup> Floor, North Wing  
Martinez, CA 94553

Nevada County Board of Supervisors  
Maidu Avenue  
Nevada City, CA 95959

Nevada County Planning Commission  
950 Maidu Avenue  
Nevada City, CA 95959

Placer County Board of Supervisors  
Fulweiler Avenue  
Auburn, CA 95603

Placer County Planning Commission  
11414 B Avenue  
Auburn, CA 95603

San Joaquin County Board of Supervisors  
E. Weber Avenue  
Room 701  
Stockton, CA 95202

San Joaquin County Planning Commission  
1810 E. Hazelton  
Stockton, CA 95205

Sacramento County Board of Supervisors  
H Street  
Room 2450  
Sacramento, CA 95814

Sacramento County Planning Commission  
827 7<sup>th</sup> Street, Room 101  
Sacramento, CA 95814

Stanislaus County Board of Supervisors  
H Street  
Modesto, CA 95354

Stanislaus County Planning Commission  
1100 H Street, 2<sup>nd</sup> Floor  
Modesto, CA 95354

Shasta County Board of Supervisors  
15 Yuba Street  
Suite 1  
Redding, CA 96001

Shasta County Planning Commission  
1855 Placer Street  
Redding, CA 96001

Solano County Board of Supervisors  
601 Texas Street  
Fairfield, CA 94533

Solano County Planning Commission  
601 Texas Street  
Fairfield, CA 94533

Sonoma County Board of Supervisors  
2550 Administration Drive  
Santa Rosa, CA 95403

Sonoma County Planning Commission  
2550 Ventura Avenue  
Santa Rosa, CA 95403

Sutter County Board of Supervisors  
1160 Civic Center Drive  
Yuba City, CA 95993

Sutter County Planning Commission  
1160 Civic Center Drive  
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Yuba City, CA 95993

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Woodland, CA 95695

Yolo County Planning Commission  
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Yuba County Board of Supervisors  
938 14<sup>th</sup> Street  
Marysville, CA 95901

Yuba County Planning Commission  
938 14<sup>th</sup> Street  
Marysville, CA 95901

Contra Costa County Board of Supervisors  
2366 "A" Stanwell Circle  
Concord, CA 94520

Contra Costa County Ag Commissioner Office  
2366 "A" Stanwell Circle  
Concord, CA 94520

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vada County Ag Commissioner Office  
5 South Auburn Street  
ass Valley, CA 95945

Griffith Yamamoto  
Placer County Ag Commissioner Office  
11477 "E" Avenue  
Auburn, CA 95603

ott Hudson  
a Joaquin County Ag Commissioner Office  
68 E. Hazelton Avenue  
ockton, CA 95201

Frank Carl  
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Sacramento, CA 95827

onald Cripe  
rislaus County Ag Commssioner Office  
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desto, CA 95358

Mary Pfeiffer  
Shasta County Ag Commissioner Office  
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usan Cohen  
lano County Ag Commissioner Office  
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anta Rosa, CA 95403

Mark Quisenberry  
Sutter County Ag Commissioner Office  
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Yuba City, CA 95991

cott Paulsen  
lo County Ag Commissioner Office  
0 Cottonwood Street  
oodland, CA 95695

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hn Westoby  
noma County Ag Commissioner Office  
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Tehama County Board of Supervisors  
P.O. Box 250  
Red Bluff, CA 96080

hama County Planning Commission  
44 Oak Street  
ed Bluff, CA 96080

Mark Black  
Tehama County Ag Commissioner Office  
1760 Walnut Street  
P.O. Box 38  
Red Bluff, CA 96080

Fresno County Board of Supervisors  
2281 Tulare Street, Room 300  
Fresno, CA 93721

Fresno County Planning Commission  
2281 Tulare Street, Room 300  
Fresno, CA 93721

Osmo Insalaco  
Fresno County Ag Commissioner Office  
730 S. Maple Avenue  
Fresno, CA 93702-4596

## **Costs**

**For Task specific line budgets see Table 5**

### **General Budget Category Notes and Explanations**

**Personnel** There will be a consistent pattern to the staffing on the project. A Senior Environmental Research Scientist will provide formal management and oversight averaging 25 billable hours per year. The Senior Environmental Research Scientist makes \$37.25/hr including benefits. An Agricultural Biologist will be lead person for the field crews, multi-agency coordination, treatment coordination and perform the education activities. The Agricultural Biologist will average approximately ½ time for 3 years. The Agricultural Biologist makes \$21.94/hr including benefits. The total field crew will consist of three Scientific Aids working 3 months full time during the summer. The Scientific Aids makes \$10.72/hr including benefits. Pesticide applications and Biological Control releases will be made by trained CDFA Biologists or collaborating agency personnel.

**Service Contracts** The following services will be contracted out- Printing of a loosestrife educational brochure will cost approximately \$10,000.00 for 40,000 copies. Water sampling and analysis will cost \$12,000.00 for Phase I and an additional \$24,000.00 for Phase II.

**Equipment** Phase I equipment costs: \$5,000.00 for a Trimble GPS unit and software. Phase II equipment costs: \$5,000.00 for a Trimble GPS unit and software.

**Materials** Phase I materials costs: \$5,000.00 for herbicides and \$1000 for an informational poster for meetings. Phase II equipment costs: \$5,000.00 for herbicides.

**Travel/Per Diem** Phase I per/diem costs: \$6000 for 60 days. Phase II per/diem costs: \$4000 for 40 days.

**Transportation** Phase I transportation costs: \$12,5000.00 for nine months vehicle rental(\$1000.0/month) and five months boat rental(\$500.0/month). Phase II transportation costs: \$9,5000.00 for eight months vehicle rental and five months boat rental.

**Indirect Costs** These costs are calculated as 15% of personnel costs. They cover CDFA Departmental and State overhead costs. Phase I indirect costs: \$19,539.98. Phase II indirect costs: \$11,866.04.

**Table 5 Phase I & II Combined BUDGET -  
Purple Loosestrife Prevention and Eradication Action**

<b>Task</b>	<b>sci aid</b>	<b>ag bio</b>	<b>sen ior</b>	<b>Direct Labor Hours</b>	<b>Direct Salary and Benefits</b>	<b>S e r v i c e Contracts</b>	<b>Material and Acquisition Costs</b>	<b>Miscellaneous and other direct costs</b>	<b>Overhead and Indirect costs</b>	<b>Total Costs</b>
<b>Task 1 - Educational brochure</b>	0	120	4	124	\$2,781.80	\$10,000.00			\$417.27	\$13,199.07
<b>Task 2 - Educational outreach</b>	0	400	10	410	\$9,148.50		\$1,000.00	\$4,000.00	\$1,372.28	\$15,520.78
<b>Task 3 - Training of professionals</b>	0	240	0	240	\$5,265.60			\$500.00	\$789.84	\$6,555.44
<b>Task 4 - Map vulnerable habitats(GIS analysis)</b>	0	120	15	135	\$3,191.55			\$2,000.00	\$478.73	\$5,670.28
<b>Task 5 - GPS of existing sites</b>	378	126	20	524	\$7,561.60		\$5,000.00		\$1,134.24	\$13,695.84
<b>Task 6- Delta wide loosestrife survey</b>	1134	378	20	1532	\$21,194.80			\$3,000.00	\$3,179.22	\$27,374.02
<b>Task 7- Contiguous basin survey</b>	1134	378	20	1532	\$21,194.80			\$3,000.00	\$3,179.22	\$27,374.02
<b>Task 8 - Update GIS</b>	180	80	10	270	\$4,057.30				\$608.60	\$4,665.90
<b>Task 9 -Assessment</b>	0	240	40	280	\$6,755.60				\$1,013.34	\$7,768.94
<b>Task 10 - Produce adaptive management plan</b>	0	240	40	280	\$6,755.60				\$1,013.34	\$7,768.94
<b>Task 11- Environmental consultation and planning</b>	0	240	10	250	\$5,638.10				\$845.72	\$6,483.82
<b>Task 12 - Implement controls</b>	1134	378	15	1527	\$21,008.55		\$5,000.00	\$3,000.00	\$3,151.28	\$32,159.83
<b>Task 13- Monitor loosestrife density/control success</b>	756	252	15	1023	\$14,191.95			\$3,000.00	\$2,128.79	\$19,320.74
<b>Task 14- Monitor water</b>	60	40	0	100	\$1,520.80	\$12,000.00			\$228.12	\$13,748.92
<b>Phase I SUBTOTAL</b>	<b>4776</b>	<b>3232</b>	<b>219</b>		<b>\$130,266.55</b>	<b>\$22,000.00</b>	<b>\$11,000.00</b>	<b>\$18,500.00</b>	<b>\$19,539.98</b>	<b>\$201,306.53</b>
<b>Task 15- Educational outreach</b>	0	100	0	100	\$2,194.00			\$4,000.00	\$329.10	\$6,523.10
<b>Task 16 - Training of professionals</b>	0	60	0	60	\$1,316.40			\$500.00	\$197.46	\$2,013.86

**Table 5 - Budget, Continued**

<b>Task 17- GPS of existing sites</b>	378	128	20	524	\$7,561.60		\$5,000.00		\$1,134.24	\$13,695.84
<b>Task 18- Butte, shasta, Upper River survey</b>	1134	378	20	1532	\$21,194.80			\$3,000.00	\$3,179.22	\$27,374.02
<b>Task 19 - Update GIS</b>	90	40	10	140	\$2,214.90				\$332.24	\$2,547.14
<b>Task 20 -Assessment</b>	0	60	10	70	\$1,688.90				\$253.34	\$1,942.24
<b>Task 21- Produce adaptive management plan</b>	0	60	10	70	\$1,688.90				\$253.34	\$1,942.24
<b>Task 22- Environmental consultation and planning</b>	0	120	10	130	\$3,005.30				\$450.80	\$3,456.10
<b>Task 23- Implement controls</b>	1134	378	15	1527	\$21,008.55		\$5,000.00	\$3,000.00	\$3,151.28	\$32,159.83
<b>Task 24- Monitor loosestrife density/control success</b>	756	252	15	1023	\$14,191.95			\$3,000.00	\$2,128.79	\$19,320.74
<b>Task 25- Monitor water</b>	120	80	0	200	\$3,041.60	\$24,000.00			\$456.24	\$27,497.84
<b>Phase II SUBTOTAL</b>	3612	1654	110		\$79,106.90	\$24,000.00	\$10,000.00	\$13,500.00	\$11,866.04	\$138,472.94
<b>TOTAL</b>	8388	4886	329	13603	\$209,373.45	\$46,000.00	\$21,000.00	\$32,000.00	\$31,406.02	\$339,779.47

## **Cost-Sharing**

It is appropriate to disclose in this section that Phase I of this proposal has been very recently selected as a Directed Action by the CALFED Non-native Invasive Species Program (NISP) for a three year project with \$200,000.00 funding. Because this award is tentative (must have full CALFED approval) and only represents partial funding for a CALFED region-wide eradication, we have been advised to still follow the proposal solicitation process and to break the project into two phases. The Phase II work in this proposal is not included in the NISP directed action because of limited NISP funding. It was felt that with limited funding, the infestations closest to the Delta should be worked on first.

While there is no formal cost-share with any other sources of outside funding, the Integrated Pest Control Branch will be making contributions to this project in terms of already existing equipment, technical support personnel (computers, GIS, pesticide applications, etc.). We will also be working closely with our own local CDFA Integrated Pest Control Branch District Weed Eradication Biologists. They will be assisting with the detection and eradication work in-kind as well as providing usage of boats and trucks not budgeted explicitly.

County Agricultural Commissioners often share or take the lead role on all County weed projects with CDFA. In line with this historic partnership CDFA has already contacted the Ag Commissioner in each county where intensive survey or eradication treatments are planned. The counties we have contacted are: Butte, Contra Costa, Nevada, Placer, San Joaquin, Sacramento, Stanislaus, Shasta, Solano, Sonoma, Sutter, Yolo, and Yuba. These Counties will be providing in-kind logistical support for site visits, follow-up work, primary detection, and eradication. The exact nature of these contributions will be determined by meeting with each county separately.

Collaboration will include, but not be limited to locally employees of the following state and federal agencies. California Department of Fish and Game, California Department of Boating and Waterways, US Bureau of Reclamation, US Fish and Wildlife Service, US Department of Agriculture - Aquatic Plant Lab. We will be giving focused training in purple loosestrife identification and soliciting participation from local agency personnel in detection and monitoring work. We will be seeking in-kind contributions of boat time, logistics help, and in detection whenever possible.



## **Applicant Qualifications**

### **California Department of Food and Agriculture**

The California Department of Food and Agriculture (CDFA) has statutory responsibility for the prevention of exotic agricultural and environmental pests from entering the State. The CDFA is concerned with invasive weeds, insects, animals, and diseases. The Department's pest prevention strategy consists of four major components:

- 1) *Exclusion*- preventing exotic pests from entering California
- 2) *Detection*- locating existing pest populations
- 3) *Eradication*- eliminating existing pest populations
- 4) *Education*, informing the public about the importance of keeping California pest-free.

### **Integrated Pest Control Branch**

Pest prevention is a major part of the CDFA's many different functions, particularly in the Plant Health and Pest Prevention Service (PHPPS). PHPPS is divided into four branches, including the Integrated Pest Control Branch (IPC). The IPC has four major programs that are directly involved in weed control:

- 1) *Weed and Vertebrate Program*
- 2) *Hydrilla Eradication Program*
- 3) *Biological Control Program*
- 4) *Noxious Weed Information, Mapping, and GIS Project*

IPC works closely with the County Agricultural Commissioner Offices, local Weed Management Areas (local weed management action and coordination groups) and other State and Federal agencies in prevention, education, detection, and control efforts. The Integrated Pest Control Branch has a long history of weed management actions and has taken the lead in noxious weed prevention, detection, education, and control in California. The Weed and Vertebrate Program is largely focused on the detection and eradication of A-rated, listed State Noxious Weeds. This group surveys the entire Delta annually (for hydrilla -at a time too late for loosestrife) and thus will serve as an invaluable resource in purple loosestrife detection and mapping. The Hydrilla Program is very similar, but focuses on a specific aquatic weed of special concern. This program, which has similar components/structure to our proposed Purple Loosestrife Project, has shown great success, hydrilla has been eradicated from 9 out of 17 infested Counties and is nearing eradication in the others. The Biological Control Program, in cooperation with the USDA and the University of California, brings natural enemies of pests into the State to permanently reduce pest populations. This group is in its second year of carrying out purple loosestrife biocontrol agent test releases in California. The Noxious Weed Information, Mapping, and GIS Project has developed a GIS and database system for mapping and tracking A-rated weed populations. This group has also facilitated formation of local Weed Management Areas throughout the State and produces a quarterly interagency weed control newsletter sent to 1500 subscribers, the "Noxious Times."

### **Nathan Dechoretz, Principle Investigator**

Experience includes over 30 years working in the field of aquatic weed control. Received B.S. in Biological Science from the University of Arizona in 1967. From 1967 to 1987 managed and conducted research at the USDA Aquatic Weed Control Research Laboratory in Davis, CA. Since 1987 has served as Program Supervisor for the Weed and Vertebrate Control, Hydrilla Eradication and Biological Control Programs, and the Weed Information, Mapping, and GIS Project at the CDFA. Has successfully organized and conducted research on hydrilla, water hyacinth, as well as, many other noxious weeds. Has conducted numerous workshops, given

countless presentations, and has authored/co-authored over 50 publications, abstracts, and reports in the field of weed management. Currently Chairs the California Interagency Noxious Weed Coordinating Committee and is a lead member of the Western Weed Coordinating Committee. Is also a member of the Weed Science Society of America, Western Society of Weed Science, Western Aquatic Plant Management Society, and Aquatic Plant Management Society.

**Steve Schoenig**, Project Manager, Co-Principle Investigator

Has 15 years experience in the fields of biological pest control weed education/research. In 1981 received B.S. in Biology of Natural Resources from UC Berkeley. At UC Davis earned two Master's degrees in Statistics and Entomology in 1981 and 1987, respectively. From 1991 to 1995 provided Departmental statistical consultation and implemented biological pest control projects/studies while serving as Associate Environmental Research Scientist with the Biological Control Program at CDFA. 1996 to present, serves as lead Senior Environmental Research Scientist for the Weed Information, Mapping, and GIS Project within the Integrated Pest Control Branch at the CDFA. Duties include: supervising 6 people, oversees mapping, database, education, research, and interagency weed management coordination projects. Has given countless presentations on weed education/control, authored/co-authored over 20 publications. Currently a board member of the California Exotic Pest Plant Council, and a member of the American Statistical Association, and the California Native Plant Society.

**Carri Benefield**, Project Coordinator

Graduated in 1996 from Saint Mary's College of California with a B.S. in Biology. Spring of 1998 earned a Master's Degree in Plant Biology, emphasis in Weed Science, from UC Davis. Fall 1998 to present, serves as a Scientific Aid for the CDFA and as Field Crops Outreach Coordinator with the UC Sustainable Research and Education Program, Davis CA. Scientific Aid duties include: Editor of "Noxious Times" quarterly newsletter and various weed education projects under the direction of the Noxious Weed Information, Mapping and GIS Project leadperson. Field Crop Outreach Coordinator duties include: organizing and facilitating farmer/scientist focus sessions and related meetings, coordinating field tours, guiding on-farm research, locating funding sources, and authoring a field manual. Has conducted, organized, and/or led research on yellow starthistle, cape ivy (formerly known as German ivy), Scotch thistle, and French broom. Currently a member of the California Exotic Pest Plant Council, California Weed Science Society, and Western Society of Weed Science. Has presented at National Conference of Undergraduate Research, Fish and Game Applicators Conference, as well as at the above mentioned Societies. Has 10 abstracts and currently has 3 manuscripts under review (Weed Science and Weed Technology), one in press (California Agriculture), and was a contributor of a chapter on purple loosestrife to "Wildland Weeds of California," book (due out October, 1999).

# APPLICATION FOR FEDERAL ASSISTANCE

OMB Approval No. 0348-0043

2. DATE SUBMITTED April 16, 1999		Applicant Identifier CA Dept. of Food and Agriculture	
		3. DATE RECEIVED BY STATE State Application Identifier N/A	
4. DATE RECEIVED BY FEDERAL AGENCY		Federal Identifier	

APPLICANT INFORMATION	
Name: State of California	Organizational Unit: Dept. of Food and Agriculture
Address (give city, county, State, and zip code): 20 N St., Room A-357 Sacramento, CA 95814	Name and telephone number of person to be contacted on matters involving this application (give area code): Nathan Dechoretz (916) 654-0768

EMPLOYER IDENTIFICATION NUMBER (EIN): 68-0325104	7. TYPE OF APPLICANT: (enter appropriate letter in box) <div style="display: flex; justify-content: space-between;"> <div>           A. State B. County C. Municipal D. Township E. Interstate F. Intermunicipal G. Special District         </div> <div>           H. Independent School Dist. I. State Controlled Institution of Higher Learning J. Private University K. Indian Tribe L. Individual M. Profit Organization N. Other (Specify) _____         </div> </div> <div style="text-align: right; border: 1px solid black; width: 30px; margin: 0 auto;">A</div>
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TYPE OF APPLICATION: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision Revision, enter appropriate letter(s) in box(es) <input type="checkbox"/> <input type="checkbox"/> Increase Award    B. Decrease Award    C. Increase Duration Decrease Duration    Other(specify): _____	9. NAME OF FEDERAL AGENCY: _____
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CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: 10-025 TITLE: Plant Pest and Animal Disease AREAS AFFECTED BY PROJECT (Cities, Counties, States, etc.): Unfunded project area of California	11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT: Purple loosestrife prevention, detection and control actions for the Sacramento-San Joaquin Delta and associated hydrological basins.
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PROPOSED PROJECT		14. CONGRESSIONAL DISTRICTS OF:	
Date 1/99	Ending Date 7/1/02	a. Applicant California	b. Project California
ESTIMATED FUNDING:		16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?	
Federal	\$	a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON: DATE _____ b. No. <input type="checkbox"/> PROGRAM IS NOT COVERED BY E. O. 12372 <input type="checkbox"/> OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW	
Applicant	\$ 339,779 47		
State	\$		
Local	\$		
Other	\$		
Program Income	\$	17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?	
TOTAL	\$ 339,779 47	<input type="checkbox"/> Yes If "Yes," attach an explanation. <input checked="" type="checkbox"/> No	

TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE APPLICANT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.		
Name of Authorized Representative Robert L. Wynn, Jr.	Title Director	Telephone Number (916) 654-0317
Signature of Authorized Representative		Date Signed 4/16/99

**PART E: Certification Regarding Lobbying**  
**Certification for Contracts, Grants, Loans, and Cooperative Agreements**

**CHECK IF CERTIFICATION IS FOR THE AWARD OF ANY OF THE FOLLOWING AND THE AMOUNT EXCEEDS \$100,000: A FEDERAL GRANT OR COOPERATIVE AGREEMENT; SUBCONTRACT, OR SUBGRANT UNDER THE GRANT OR COOPERATIVE AGREEMENT.**

**CHECK IF CERTIFICATION IS FOR THE AWARD OF A FEDERAL LOAN EXCEEDING THE AMOUNT OF \$150,000, OR A SUBGRANT OR SUBCONTRACT EXCEEDING \$100,000, UNDER THE LOAN.**

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

As the authorized certifying official, I hereby certify that the above specified certifications are true.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL

*Alice L. Wright*

TYPED NAME AND TITLE

**ALICE L. WRIGHT  
CONTRACTS OFFICER  
CA DEPT OF FOOD & AGRICULTURE**

DATE

*4/9/99*

U.S. Department of the Interior

**Certifications Regarding Debarment, Suspension and  
Other Responsibility Matters, Drug-Free Workplace  
Requirements and Lobbying**

Persons signing this form should refer to the regulations referenced below for complete instructions:

**Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions -** The prospective primary participant further agrees by submitting this proposal that it will include the clause titled, "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. See below for language to be used; use this form for certification and sign; or use Department of the Interior Form 1954 (DI-1954). (See Appendix A of Subpart D of 43 CFR Part 12.)

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions -** (See Appendix B of Subpart D of 43 CFR Part 12.)

**Certification Regarding Drug-Free Workplace Requirements -** Alternate I. (Grantees Other Than Individuals) and Alternate II. (Grantees Who are Individuals) - (See Appendix C of Subpart D of 43 CFR Part 12)

Signature on this form provides for compliance with certification requirements under 43 CFR Parts 12 and 18. The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of the Interior determines to award the covered transaction, grant, cooperative agreement or loan.

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**PART A: Certification Regarding Debarment, Suspension, and Other Responsibility Matters -  
Primary Covered Transactions**

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*CHECK IF THIS CERTIFICATION IS FOR A PRIMARY COVERED TRANSACTION AND IS APPLICABLE.*

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
  - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
  - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
  - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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**PART B: Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -  
Lower Tier Covered Transactions**

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*CHECK IF THIS CERTIFICATION IS FOR A LOWER TIER COVERED TRANSACTION AND IS APPLICABLE.*

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**PART C: Certification Regarding Drug-Free Workplace Requirements**

CHECK ☒ IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS NOT AN INDIVIDUAL

**Alternate I. (Grantees Other Than Individuals)**

**A. The grantee certifies that it will or continue to provide a drug-free workplace by:**

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing an ongoing drug-free awareness program to inform employees about--
  - (1) The dangers of drug abuse in the workplace;
  - (2) The grantee's policy of maintaining a drug-free workplace;
  - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
  - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will --
  - (1) Abide by the terms of the statement; and
  - (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;
- (e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification numbers(s) of each affected grant;
- (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted --
  - (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
  - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a) (b), (c), (d), (e) and (f).

**B. The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:**

**Place of Performance (Street address, city, county, state, zip code)**

Many work sites throughout California  
Headquarters: 1220 N St., Room A357, Sacramento CA 95814

Check ☐ if there are workplaces on file that are not identified here.

**PART D: Certification Regarding Drug-Free Workplace Requirements**

CHECK ☐ IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS AN INDIVIDUAL

**Alternate II. (Grantees Who Are Individuals)**

- (a) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant;
- (b) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to the grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.

## INSTRUCTIONS FOR THE SF-424

The reporting burden for this collection of information is estimated to average 45 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0043), Washington, DC 20503.

**PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.**

This is a standard form used by applicants as a required facesheet for preapplications and applications submitted for Federal assistance. It will be used by Federal agencies to obtain applicant certification that States which have established a review and comment procedure in response to Executive Order 12372 and have selected the program to be included in their process, have been given an opportunity to review an applicant's submission.

<p><b>Item:</b></p> <p><b>Entry:</b></p> <p>Self-explanatory.</p> <p>Date application submitted to Federal agency (or State if applicable) and applicant's control number (if applicable).</p> <p>State use only (if applicable).</p> <p>If this application is to continue or revise an existing award, enter present Federal identifier number. If for a new project, leave blank.</p> <p>Legal name of applicant, name of primary organizational unit which will undertake the assistance activity, complete address of the applicant, and name and telephone number of the person to contact on matters related to this application.</p> <p>Enter Employer Identification Number (EIN) as assigned by the Internal Revenue Service.</p> <p>Enter the appropriate letter in the space provided.</p> <p>Check appropriate box and enter appropriate letter(s) in the space(s) provided:</p> <p>— "New" means a new assistance award.</p> <p>— "Continuation" means an extension for an additional funding/budget period for a project with a projected completion date.</p> <p>— "Revision" means any change in the Federal Government's financial obligation or contingent liability from an existing obligation.</p> <p>Name of Federal agency from which assistance is being requested with this application.</p> <p>Use the Catalog of Federal Domestic Assistance number and title of the program under which assistance is requested.</p> <p>Enter a brief descriptive title of the project. If more than one program is involved, you should append an explanation on a separate sheet. If appropriate (e.g., construction or real property projects), attach a map showing project location. For preapplications, use a separate sheet to provide a summary description of this project.</p>	<p><b>Item:</b></p> <p><b>Entry:</b></p> <p>12. List only the largest political entities affected (e.g., State, counties, cities).</p> <p>13. Self-explanatory.</p> <p>14. List the applicant's Congressional District and any District(s) affected by the program or project.</p> <p>15. Amount requested or to be contributed during the first funding/budget period by each contributor. Value of in-kind contributions should be included on appropriate lines as applicable. If the action will result in a dollar change to an existing award, indicate <u>only</u> the amount of the change. For decreases, enclose the amounts in parentheses. If both basic and supplemental amounts are included, show breakdown on an attached sheet. For multiple program funding, use totals and show breakdown using same categories as item 15.</p> <p>16. Applicants should contact the State Single Point of Contact (SPOC) for Federal Executive Order 12372 to determine whether the application is subject to the State intergovernmental review process.</p> <p>17. This question applies to the applicant organization, not the person who signs as the authorized representative. Categories of debt include delinquent audit disallowances, loans and taxes.</p> <p>18. To be signed by the authorized representative of the applicant. A copy of the governing body's authorization for you to sign this application as official representative must be on file in the applicant's office. (Certain Federal agencies may require that this authorization be submitted as part of the application.)</p>
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**BUDGET INFORMATION - Non-Construction Programs**

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Purple loosestrife Program		\$	\$	\$	\$ 339,779.47	\$ 339,779.47
2.						
3.						
4.						
5. Totals		\$	\$	\$	\$ 339,779.47	\$ 339,779.47
<b>SECTION II: BUDGET CATEGORIES</b>						
6. Object Class Categories		GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
		(1) Phase I	(2) Phase II	(3)	(4)	
a. Personnel		\$ 106,946.38	\$ 65,949.81	\$	\$	\$ 209,373.45
b. Fringe Benefits		23,320.17	13,157.09			
c. Travel		6,000.00	4,000.00			10,000.00
d. Equipment		5,000.00	5,000.00			10,000.00
e. Supplies		6,000.00	5,000.00			11,000.00
f. Contractual		22,000.00	24,000.00			46,000.00
g. Construction						
h. Other Vehicle rental		12,500.00	9,500.00			22,000.00
i. Total Direct Charges (sum of 6a-6h)		181,766.55	126,606.90			308,373.45
j. Indirect Charges		19,539.98	11,866.04			31,406.02
k. TOTALS (sum of 6i and 6j)		\$ 201,306.53	\$ 138,472.94	\$	\$	\$ 339,779.47
7. Program Income		\$	\$	\$	\$	\$



(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS
8. Purple loosestrife Program	\$ 339,779.47	\$	\$	\$ 339,779.47
9.				
10.				
11.				
12. TOTAL (sum of lines 8 - 11)	\$ 339,779.47	\$	\$	\$ 339,779.47

SECTION D - FORECASTED CASH NEEDS					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$	\$	\$	\$	\$
14. NonFederal	143,382.73	86,283.92	24,329.23	17,197.25	15,572.33
15. TOTAL (sum of lines 13 and 14)	143,382.73	86,283.92	24,329.23	17,197.25	15,572.33

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT				
(a) Grant Program	FUTURE FUNDING PERIODS (Years)			
	(b) First	(c) Second	(d) Third	(e) Fourth
16.	\$	\$	\$	\$
17.				
18.				
19.				
20. TOTAL (sum of lines 16-19)	\$	\$	\$	\$

SECTION F - OTHER BUDGET INFORMATION	
21. Direct Charges:	22. Indirect Charges:
23. Remarks:	

## INSTRUCTIONS FOR THE SF-424A

Public reporting burden for this collection of information is estimated to average 180 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0044), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET, AND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

### General Instructions

This form is designed so that application can be made for funds in one or more grant programs. In preparing the budget, refer to any existing Federal grantor agency guidelines which describe how and whether budgeted amounts should be separately shown for different functions or activities within the program. For some programs, grantor agencies may require budgets to be separately shown by function or activity. For other programs, grantor agencies may require a breakdown by function or activity. Sections A, B, C, and D should include budget estimates for the whole project except when applying for assistance which requires Federal authorization in annual or other funding period increments. In the latter case, Sections A, C, and D should provide the budget for the first budget period (usually a year) and Section E should present the need for Federal assistance in the subsequent budget periods. All applications should contain a breakdown by the object class categories shown in Lines a-k of Section B.

#### Section A. Budget Summary Lines 1-4 Columns (a) and (b)

For applications pertaining to a *single* Federal grant program (Federal Domestic Assistance Catalog number) and *not* requiring a functional or activity breakdown, enter on Line 1 under Column (a) the catalog program title and the catalog number in Column (b).

For applications pertaining to a *single* program requiring budget amounts by multiple functions or activities, enter the name of each activity or function on each line in Column (a), and enter the catalog number in Column (b). For applications pertaining to multiple programs where none of the programs require a breakdown by function or activity, enter the catalog program title on each line in Column (a) and the respective catalog number on each line in Column (b).

For applications pertaining to a *multiple* programs where one or more programs require a breakdown by function or activity, prepare a separate sheet for each program requiring the breakdown. Additional sheets should be used when one form does not provide adequate space for all breakdown of data required. However, when more than one sheet is used, the first sheet should provide the summary totals by programs.

#### Lines 1-4, Columns (c) through (g)

For *new* applications, leave Columns (c) and (d) blank. For each line entry in Columns (a) and (b), enter in Columns (e), (f), and (g) the appropriate amounts of funds needed to support the project for the first funding period (usually a year).

For continuing grant program applications, submit these forms before the end of each funding period as required by the grantor agency. Enter in Columns (c) and (d) the estimated amounts of funds which will remain unobligated at the end of the grant funding period only if the Federal grantor agency instructions provide for this. Otherwise, leave these columns blank. Enter in Columns (e) and (f) the amounts of funds needed for the upcoming period. The amount(s) in Column (g) should be the sum of amounts in Columns (e) and (f).

For supplemental grants and changes to existing grants, do not use Columns (c) and (d). Enter in Column (e) the amount of the increase or decrease of Federal funds and enter in Column (f) the amount of the increase or decrease of non-Federal funds. In Column (g) enter the new total budgeted amount (Federal and non-Federal) which includes the total previous authorized budgeted amounts plus or minus, as appropriate, the amounts shown in Columns (e) and (f). The amount(s) in Column (g) should not equal the sum of amounts in Columns (e) and (f).

Line 5--Show the totals for all columns used.

### Section B. Budget Categories

In the column headings (1) through (4), enter the titles of the same programs, functions, and activities shown on Lines 1-4, Column (a), Section A. When additional sheets are prepared for Section A, provide similar column headings on each sheet. For each program, function or activity, fill in the total requirements for funds (both Federal and non-Federal) by object class categories.

Lines 6a-i--Show the totals of Lines 6a and 6h in each column.

Line 6j--Show the amount of indirect cost.

Line 6k--Enter the total of amounts on Lines 6i and 6j. For all applications for new grants and continuation grants the total amount in column (5), Line 6k, should be the same as the total amount shown in Section A, Column (g), Line 5. For supplemental grants and changes to grants, the total amount of the increase or decrease as shown in Columns (1)-(4), Line 6k should be the same as the sum of the amounts in Section A, Columns (e) and (f) on Line 5.

Line 7--Enter the estimated amount of income, if any, expected to be generated from this project. Do not add or subtract this amount from the total project amount. Show under the program.

## INSTRUCTIONS FOR THE SF-424A (continued)

narrative statement the nature and source of income. The estimated amount of program income may be considered by the Federal grantor agency in determining the total amount of the grant.

### Section C. Non-Federal Resources

Lines 8-11--Enter amounts of non-Federal resources that will be used on the grant. If in-kind contributions are included, provide a brief explanation on a separate sheet.

Column (a) - Enter the program titles identical to Column (a), Section A. A breakdown by function or activity is not necessary.

Column (b) - Enter the contribution to be made by the applicant.

Column (c) - Enter the amount of the State's cash and in-kind contribution if the applicant is not a State or State agency. Applicants which are a State or State agencies should leave this column blank.

Column (d) - Enter the amount of cash and in-kind contributions to be made from all other sources.

Column (e) - Enter totals of Columns (b), (c), and (d).

Line 12--Enter the total for each of Columns (b)-(e). The amount in Column (e) should be equal to the amount on Line 5, Column (f) Section A.

### Section D. Forecasted Cash Needs

Line 13--Enter the amount of cash needed by quarter from the grantor agency during the first year.

Line 14--Enter the amount of cash from all other sources needed by quarter during the first year.

Line 15--Enter the totals of amounts on Lines 13 and 14.

### Section E. Budget Estimates of Federal Funds Needed for Balance of the Project.

Lines 16-19--Enter in Column (a) the same grant program titles shown in Column (a), Section A. A breakdown by function or activity is not necessary. For new applications and continuation grant applications, enter in the proper columns amounts of Federal funds which will be needed to complete the program or project over the succeeding funding period (usually in years). This section need not be completed for revisions (amendments, changes, or supplements) to funds for the current year of existing grants.

If more than four lines are needed to list the program titles, submit additional schedules as necessary.

Line 20--Enter the total for each of the Columns (b)-(e). When additional schedules are prepared for this Section, annotate accordingly and show the overall totals on this line.

### Section F. Other Budget Information

Line 21--Use this space to explain amounts for individual direct object-class cost categories that may appear to be out of the ordinary or to explain the details as required by the Federal grantor agency.

Line 22--Enter the type of indirect rate (provisional, predetermined, final or fixed) that will be in effect during the funding period, the estimated amount of the base to which the rate is applied, and the total indirect expense.

Line 23--Provide any other explanations or comments deemed necessary.

**ASSURANCES - NON-CONSTRUCTION PROGRAMS**

The reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

**PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.**

**NOTE:** Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

I, duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.

Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.

Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).

12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL

*Alice L. Wright*

SIGNATURE OF AWARDING AGENCY

TITLE

**ALICE L. WRIGHT  
CONTRACTS OFFICER  
CA DEPT OF FOOD & AGRICULTURE**

DATE SUBMITTED

*4/9/99*

CA DEPT OF FOOD & AGRICULTURE  
CONTRACTS OFFICER  
ALICE L. WRIGHT